

V. *Coronary Blood Flow Responses to Carbon Monoxide**

(a) INTRODUCTION

Coronary blood flow studies were designed to evaluate the response of this sectional circulation to various levels of carboxyhemoglobin. The major emphasis of these investigations was placed on the immediate response to an acute exposure when HbCO levels ranged from 5-40%. The actual mean HbCO levels attained were from 6.2 to 35.7%. A second group of animals were studied after they had been chronically exposed over a period of 6 weeks (4 hours daily) to an ambient environment containing 100 ppm of carbon monoxide. In another group animals had their conduction system (A-V node and Bundle of His) surgically removed to simulate a well known cardiac disorder. These animals have slowed heart rates and required the implantation of an external pacemaker in order to maintain adequate cardiovascular function. Animals from this group were studied at various intervals following the implantation of the externally charged pacemaker.

* See pages 116-119 for literature references applicable to this section.